Office of Chief Counsel Internal Revenue Service

memorandum

CC:LM:CTM: :TL-N-2986-99

date: February 13, 2001

to:

Team Coordinator
Examination Division,

from:

Attorney

subject:

R&E Credit on

(Test

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The attached document contains my suggestions for a Notice of Proposed Adjustment ("NOPA") concerning 's treatment of used for testing for purposes of section 174 and the research credit. As we discussed, it expands on the position in the NOPA you issued in connection with #1.

As you requested, the attached NOPA does not address the fundamental question of whether the work performed with the testing was qualified research. Therefore, issues such as the discovery test, the application of "shrink back" rules, the commencement of commercial production and adaptation

(particularl	y with	respect	to	the	tests	on ,				and
-	equipp	ed)	are	not	covered	by	this	NOPA.	

The factual development portion of the attached NOPA does not include any dollar amounts. We understand that you expect to reach an agreement with the taxpayer concerning the dollar amounts at issue with respect any adjustments.

Please contact the undersigned if you have any questions or require further assistance.

Ву:_			
	Attorney		

PROGRAM RESEARCH CREDITS & DEDUCTIONS ON

I. ISSUE

entitled to treat the construction costs of used to conduct tests as "research and experimental expenditures" (within the meaning of I.R.C. § 174) and "qualified research expenditures" (within the meaning of I.R.C. § 41)?

II. FACTS

completed its first

("#1"), in _____, and used the _____,

conduct some of the tests required for

After several years of use as a demonstration _____, this

was finally sold to ______ in ____,

depreciated this ______ for book purposes,

but deducted the construction costs under section 174.

Additional tests were performed on other (the "Presold "). The Presold retained the same identification numbers from the time they began construction until the time they were customers. When they rolled off the delivered to assembly line they were already bearing the ") of the customer installed in the Presold for purposes of the te<u>sts. T</u>he was removed when the testing was completed. then refurbished each of the before delivering it to the customer. The time between the date each Presold initially rolled off the assembly line and the time it was finally delivered to the customer varied, but was generally about one year.

engines, were delivered to pursuant to the purchase agreement. In installed other engines on sold to other carriers. In conducted the tests for equipped on

the first sold to , and conducted the equipped on the first sold to sold to full price for these sold to .

depreciated the for book purposes, and charged the costs of replacing parts (such as wheels, tires and brakes) to a research work order. For book purposes, treated the costs of the Presold as work in process (essentially inventory) until the were delivered to the customers. For tax purposes, deducted the construction costs of the aircraft pursuant to section 174.

III. LAW

Excerpts from Section 174 (Research and Experimental Expenditures)

(c) LAND AND OTHER PROPERTY. -- This section shall not apply to any expenditure . . . for the acquisition or improvement of property to be used in connection with the research or experimentation and of a character which is subject to the allowance under section 167 (relating to allowance for depreciation, etc.) . . ; but for purposes of this section allowances under section 167 . . . shall be considered as expenditures.

Excerpts from Treasury Regulation § 1.174-2

- (b) Certain expenditures with respect to land and other property.
 - (1) Expenditures by the taxpayer . . . for the acquisition or improvement of property which is subject to an allowance for depreciation under section 167 . . . are not deductible under section 174, irrespective of the fact that the property or improvements may be used by the taxpayer in connection with research or experimentation. . . . If any part of the cost of acquisition or improvement of depreciable property is attributable to research or experimentation (whether made by the taxpayer or another), see subparagraphs (2), (3), and (4) of this paragraph.
 - (2) Expenditures for research or experimentation which result, as an end product of the research or experimentation, in depreciable property to be used in the taxpayer's trade or

business may, subject to the limitations of subparagraph (4) of this paragraph, be allowable as a current expense deduction under section 174(a). Such expenditures cannot be amortized under section 174(b) except to the extent provided in paragraph (a)(4) of § 1.174-4.

(4) The deductions referred to in subparagraphs (2) and (3) of this paragraph for expenditures in connection with the acquisition or production of depreciable property to be used in the taxpayer's trade or business are limited to amounts expended for research or experimentation. For the purpose of the preceding sentence, amounts expended for research or experimentation do not include the costs of the component materials of the depreciable property, the costs of labor or other elements involved in its construction and installation, or costs attributable to the acquisition or improvement of the property. For example, a taxpayer undertakes to develop a new machine for use in his business. He expends \$30,000 on the project of which \$10,000 represents the actual costs of material, labor, etc., to construct the machine, and \$20,000 represents research costs which are not attributable to the machine itself. Under section 174(a) the taxpayer would be permitted to deduct the \$20,000 as expenses not chargeable to capital account, but the \$10,000 must be charged to the asset account (the machine).

Excerpts from Section 41 (Research Activities)

- (b) (1) QUALIFIED RESEARCH EXPENSES.--The term "qualified research expenses" means the sum of the following amounts which are paid or incurred by the taxpayer during the taxable year in carrying on any trade or business of the taxpayer--
 - (A) in-house research expenses, and
 - (B) contract research expenses.

- (2) IN-HOUSE RESEARCH EXPENSES. --
 - (A) IN GENERAL.--The term
 "in-house research expenses"
 means--
 - (i) any wages paid or incurred to an employee for qualified services performed by such employee,
 - (ii) any amount paid or incurred for supplies used in the conduct of qualified research
 - (C) SUPPLIES.--The term "supplies" means any tangible property other than--
 - (i) land or improvements to land, and
 - (ii) property of a character subject to the allowance for depreciation.
- (d) QUALIFIED RESEARCH DEFINED. For purposes of this section-
 - (1) In General.-The term "qualified research" means research-
 - (A) with respect to which expenditures may be treated as expenses under section 174.

Such term does not include any activity described in paragraph (4).

- (4) Activities For Which Credit Not Allowed.-The term "qualified research" shall not include the following-
 - (A) Research After Commercial Production- Any research conducted after the beginning of commercial production of the business component.
 - (B) Adaptation of Existing
 Business Components- Any
 research related to the
 adaptation of an existing
 business component to a
 particular customer's
 requirement or need.

Excerpt from Treasury Regulation § 1.41-2

(a) Trade or business requirement--(1) In general. An inhouse research expense of the taxpayer . . . is a qualified research expense only if the expense is paid or incurred by the taxpayer in carrying on a trade or business of the taxpayer. The phrase "in carrying on a trade or business" has the same meaning for purposes of section 41(b)(1) as it has for purposes of section 162; thus, expenses paid or incurred in connection with a trade or business within the meaning of section 174(a) (relating to the deduction for research and experimental expenses) are not necessarily paid or incurred in carrying on a trade or business for purposes of section 41.

IV. IRS POSITION

A. Summary

#1 and the Presold (referred to collectively as "the costs of these cannot be deducted pursuant to section 174 or treated as qualified research expenses ("QRE") for purposes of the research credit.1

B. Section 174

Property of a character which is subject to the allowance for depreciation is not eligible for a current deduction under Section 174. I.R.C. § 174(c); Treas. Reg. § 1.174-2(b)(1). Therefore, if the are "property of a character which is subject to the allowance for depreciation," the costs of the are not deductible under section 174.

1. Property of a Character Subject to the Allowance for Depreciation: #1

The term "property of a character subject to the allowance for depreciation" means subject to exhaustion, wear and tear, or obsolescence, in the context of former section 168(c)(ACRS). Simon v. Commissioner, 103 T.C. 247, 260 (1994) (court reviewed), aff'd, 68 F.3d 41 (2nd Cir.

This notice does not address the question of whether the work performed with the Test is research for purposes of section 174 and section 41, and simply assumes, for purposes of argument, that all testing is qualified research under both statutes. This notice also does not address the treatment of the or of the Test Articles. However, these items should be treated in a manner similar to #1.

1995), nonacq. 1996-29 I.R.B. 4; Arkla, Inc. v. United States, 37 F.3d 621, 624-25 (Fed. Cir. 1994); Noyce v. Commissioner, 97 T.C. 670, 688-90 (1991) (section 168 deduction allowed to corporate executive for personal airplane used for business travel).

If was entitled to claim depreciation on the they were "property of a character subject to the allowance for depreciation," whether or not claimed depreciation. Arkla, Inc. v. United States, 37 F.3d 621, 624-25 (Fed. Cir. 1994); Twentieth Century-Fox Film Corp. v. Commissioner, 372 F. 2d 281 (2d Cir. 1967), aff'q, 45 T.C. 137 (1965).

used #1 in its business, and depreciated the for book purposes. The was subject to exhaustion, wear and tear, and obsolescence. It is clear that was entitled to claim depreciation on #1, and that #1 was therefore property "of a character which is subject to the allowance under section 167." Therefore, section 174 deduction for the cost of #1. is entitled to claim a section 174 deduction for only the depreciation on #1.

These rules are clearly explained in the legislative history of the research credit, which states:

The cost of land and the full cost of depreciable or depletable property are expressly excluded from section 174 elections (sec. 174(c)); that is, the full cost of a research building or of equipment used for research cannot be deducted in one year.

However, the amounts which can be expensed or amortized under section 174 include amounts for depreciation or depletion with respect to depreciable or depletable property used for research activities. (Sec. 174(c); Treas. Reg. § 1.174-2(b)).

Sex. Rep. No. 97-144, 97th Cong. 1st Sess., 1981-2 C.B. 412, 438 (emphasis added).

argues (see Draft Comments that the costs of prototypes and test articles used in research are deductible under section 174, regardless of any future use, because they are utilized in the research process.

Again it should be noted that the test articles and [#1] were prototypes integral to the R&E activity, not general purpose assets that were

supporting R&E activity with potential future non-R&E uses. Therefore these prototypes are not "property of a character subject to depreciation."

Section 174 allows taxpayers to deduct the costs of research activities which might, because of their future benefits to the taxpayer, otherwise have to be capitalized. It does not allow taxpayers to deduct the cost of equipment built or acquired "to be used in connection with research or experimentation and of a character which is subject to the allowance" for depreciation. Ekman v. Commissioner, 184 F.3d 522, 526 (6th Cir. 1999), aff'g/T.C. Memo. 1997-318 (taxpayer was not permitted to deduct the acquisition cost of a Porsche engine which he used for research). The legislative history cited above (which states that equipment used for research cannot be deducted under section 174) also demonstrates the error in section 174 also

Treasury Regulation § 1.174-2(b) (4) (see "LAW," above) illustrates the operation of section 174 by explaining that the design costs of a prototype were deductible, while the construction costs were not. Attempted to distinguish this example by arguing that the constructed machine, unlike #1, was not a prototype used to determine the validity of a proposed design. Again, seems to believe that section 174 allows taxpayer to deduct the costs of all items used in research, including the construction costs of property of a character subject to the allowance for depreciation. As explained above, there is no support for this position.

 Property of a Character Subject to the Allowance for Depreciation: Presold Aircraft

The IRS agrees that was not entitled to depreciate the Presold were still "of a character which is subject to the allowance under section 167," and not deductible under section 174. Referring to Treas. Reg. § 1.174-2(b), the Sixth Circuit stated:

The clear import . . . is that the character of the property, not the use of the property, is critical . . .

Ekman k. Commissioner, 184 F.3d 522, 526 (6th Cir. 1999), aff'q/ T.C. Memo. 1997-318. As discussed below, this interpretation of the term is consistent with its use in other contexts.

Section 1231(b)(1)² provides an example of the use of this term. For purposes of that statute, it is clear that inventory and property held primarily for sale to customers could be of a character which is subject to the allowance for depreciation. Otherwise, the provisions of sections 1231(b)(1)(A) and (B) would be redundant.

Furthermore, the section 1231(b)(1) requirement that the property both be used in a trade or business and be of a character which is subject to the allowance for depreciation, is evidence that the use in a trade or business is a separate requirement, and is not subsumed into the term "character which is subject to the allowance for depreciation."

has cited three revenue rulings as support for its argument that the subsequent use of experimental is irrelevant for purposes of section 174. None of these rulings concern pre-sold equipment, and these rulings do not otherwise support 's argument.

In Revenue Ruling 85-186, 1985-2 C.B. 84, the taxpayer deducted the costs of developing technology (an intangible asset) pursuant to section 174. The taxpayer used the technology in its business, but later discontinued that portion of its business and sold the technology. The taxpayer was not required to recharacterize the previously deducted costs under the tax benefit rule. This ruling is distinguished from the current situation because the technology was not of a character subject to depreciation, and because the technology was not developed with the intention of selling it.

The relevant portions of section 1231(b)(1) provide:

GENERAL RULE.--The term "property used in the trade or business" means property used in the trade or business, of a character which is subject to the allowance for depreciation provided in section 167, held for more than 1 year, and real property used in the trade or business, held for more than 1 year, which is not--

⁽A) property of a kind which would properly be includible in the inventory of the taxpayer if on hand at the close of the taxable year,

⁽B) property held by the taxpayer primarily for sale to customers in the ordinary course of his trade or business.

In Revenue Ruling 75-122, 1975-1 C.B. 87, the taxpayer was permitted to deduct "those expenditures incurred at the research laboratory" that were directly related to the development of prototype mining equipment under section 174. The ruling, which is primarily concerned with restrictions for mining activities, does not state that the prototype was used in the taxpayer's business (or sold to another company). It also does not state that the taxpayer was even attempting to deduct the costs of constructing (as opposed to developing) the prototype. In this case, has been permitted to deduct the development costs and the testing costs; the Service has contested only selection of certain construction costs.

C. Section 41: Supplies

's implicit argument must be that the are supplies for purposes of the research credit. The term "supplies" is used in a number of Code provisions, and refers to tangible personal property which is either relatively inexpensive or is quickly consumed. By excluding "property of a character subject to the allowance for depreciation" from the statutory definition of supplies contained in section 41(b)(2)(C), Congress applied this traditional definition.

Also expanded the definition of "supplies" by including costs of inventory. The were expensive and were not consumed in the research. They were not "supplies" for purposes of the research credit.

1. Traditional tax definition

A "supply" is an expensible item either consumed or used in the taxpayer's business during the taxable year, and is generally deducted under section 162 or section 212, as an indirect cost. Treas. Reg. § 1.162-3 (allowing taxpayers to claim a current deduction for "incidental materials or supplies" if there are no records of physical consumption or physical inventories); Baird & Son, Inc. v. Commissioner, 2 B.T.A. 901, 904 (1925); E. Rauh & Sons Fertilizer Co. v. Commissioner, 12 B.T.A. 468, 471 (1928), acg. VIII C.B. 1; Read Phosphate Co. v. Commissioner, 13 B.T.A. 39, 41 (1928), acg. VIII C.B. 1; Smith Leasing Co. v. Commissioner, 43 T.C. 37, 40-41 (1964).

Supplies are indirect costs. Treas. Reg. § 1.451-3(d)(5)(ii)(F). In contrast, costs of materials which become an integral part of the subject matter of the contract, or are consumed in its manufacture are "direct" costs. Treas. Reg. § 1.451-3(d)(5)(i). Direct costs (such as inventory) are not deducted; they are included in the basis of assets. Treas. Reg. § 1.471-11(a). The costs of the Presold are direct costs and cannot be supplies, an indirect cost.

The term "supplies" is used in dozens of Code sections. These sections use the term in a manner consistent with the approach of Treasury Regulation section 1.162-3. Supplies are distinct from equipment (I.R.C. §§ 48, 127, 1253, 4041, 4261), tools (I.R.C. § 127), and merchandise held for resale (I.R.C. § 3121). The Code contains references to farming supplies (I.R.C. § 263A, 447, 464, 521), school supplies (I.R.C. § 117, 127, 529), funeral supplies (I.R.C. § 816), medical supplies (I.R.C. § 164), supplies for making motion pictures (I.R.C. § 48), and supplies for vessels or aircraft (I.R.C. §§ 4041, 4092, 4093, 4221, 4222, 5053, 5055, 6416, 6427). None of these items are held for resale.

When a statute uses a term with a clear or well-settled meaning, the courts interpret statutes to adopt that meaning, absent unequivocal evidence of a contrary congressional intent. Lenz v. Commissioner, 101 T.C. 260, 265 (1993). As discussed below, the legislative history indicates that Congress intended that the traditional definition of "supply" would apply for purposes of the research credit.

2. Legislative history

The research credit was originally enacted as section 44F, and was later reenacted as section 41. The provisions concerning supplies were not changed. Prior section 44F(b)(2)(C)(ii) originated with provisions contained in the House Bill, H.R. 4242, which Congress enacted without change. Sec. 221(a), Pub. L. No. 97-34, 97th Cong., 1st Sess. (Aug. 13, 1981), 1981-2 C.B. 293. Both section 44F and section 41 required that qualified research expenses ("QRE") be incurred in carrying on the taxpayer's trade or business, and both statutes excluded the costs incurred for "property of a character subject to an allowance for depreciation" from QRE.

The Senate Finance Committee originally recommended a bill which did not allow a credit for "supplies." H.J. Res. 266, S. Rep. No. 144, 97th Cong., 1st Sess. (1981). The House bill allowed the credit for supplies, and the Senate then conformed its bill with the House bill's provisions concerning supplies. 127 Cong. Rec. S8488 (July 27, 1981). Senator Glenn, the lead sponsor of the floor amendment which expanded the definition of qualified research expenses to include in-house research supplies explained his amendment by stating that:

While the Finance Committee's proposal helps to encourage future investment in R and D by providing incentives only for increases in research and experimentation wage expenditures, it does little for companies that invest as much in materials and supplies as in the talent to use them. It favors companies that could increase the

research efforts by the mere addition of staff, but it ignores such items as laboratory supplies and leased computer time. . .

Our amendment will qualify expenditures for materials, supplies, and computer time for the tax credit, and is drafted in a manner that will guard against additional revenue losses.

Cong. Rec. at S8489 (July 27, 1981). A co-sponsor of the amendment, Senator Danforth, stated that the amendment has "little or no revenue effect." <u>Id</u>.

The legislative history is consistent with the traditional tax definition of supplies, stating that:

supplies eligible for the credit include supplies used in experimentation by a laboratory scientist, in the entering by a laboratory assistant of research data into a computer as part of the conduct of research, or in the machining by a machinist of a part of an experimental model. On the other hand, supplies used in preparing salary checks of laboratory scientists or in performing financial or accounting services for the taxpayer . . . are not eligible for the . . . credit.

H. Rep. No. 201, 97th Cong. 1st Sess. 109, 118 (1981), 1981-2 C.B. 352, 362.

The House Committee Report also stated:

Property which is of a character subject to the allowance for depreciation is not eligible for the credit whether or not amounts of depreciation are deductible during the year and whether or not the cost of such property can be expensed.

H. Rep. No. 201/ 97th Cong. 1st Sess. 109, 118 (1981), 1981-2 C.B. 352, 361.

The reference in the House Committee Report to "whether or not the cost of such property can be expensed" refers to the effect of section 174. Congress was aware of the interplay between section 174 and the definition of "qualified research expense" in prior section 44F. See H. Rep. No. 97-201, supra, at 110; 1981-2 C.B. 438. The language in the House Committee Report reflects congressional intent to preclude expenses for property of a character subject to depreciation from being counted as QRE, whether or not the amounts of depreciation are deductible under section 174.

In explaining prior section 44F, Congress also acknowledged that expenditures to acquire depreciable assets

would not have qualified under the language in section 174(b) which is similar to the language in prior section 44F(b)(2)(C)(ii). The House Committee Reports for the research credit show that Congress knew that section 174 precluded the cost of depreciable property, such as research buildings or equipment, from being deducted during one year. H. Rep. No. 97-201, supra, at 110; 1981-2 C.B. 438. In enacting prior section 44F(b)(2), Congress retained the disqualification based on the depreciable character of property, but made the existence or non-existence of a depreciation deduction irrelevant to the credit.

Contemporaneously with the enactment of prior section 44F, Congress used the term "property of a character subject to the allowance for depreciation" to define "recovery property" in prior section § 168(c). In that section, it is quite clear that property could be "property of a character subject to the allowance for depreciation," without being used by the taxpayer in its trade or business. Otherwise the separate requirement of prior section 168(c)(1)(A) would be utterly superfluous. It is a "settled rule that a statute must, if possible, be construed in such a fashion that every word has some operative effect." United States v. Nordic Village, Inc., 503 U.S. 30, 35 (1992).

3. "Property of a Character Subject to the Allowance for Depreciation"

Congress limited material costs to the traditional definition of "supplies" by excluding costs incurred to acquire "property of a character subject to the allowance for depreciation" from QRE. I.R.C. § 41(b)(2)(C)(ii). As explained above, for purposes of section 174, the

was "property of a character which is subject to the allowance under section 167 (relating to allowance for depreciation, etc.)" The legislative history of the research credit indicates that it was intended to be more restrictive than section 174.

Prior section 168 enacted the accelerated cost recovery system to replace the method of calculating depreciation under section 167. The relevant portions of prior section 168 provided:

⁽a) Allowance of deductions. There shall be allowed as a deduction . . . the amount determined under this section with respect to recovery property.

⁽c)(1) Recovery property defined. . . the term "recovery property" means tangible property of a character subject to the allowance for depreciation--

⁽A) used in a trade or business, or

⁽B) held for the production of income.

As explained in the discussion of the legislative history of the research credit, it is clear that if was entitled to depreciate the cost of the entitled to depreciate #1, so the costs of that aircraft cannot be ORE.

may argue that the Presold were not "property of a character subject to the allowance for depreciation" because was not entitled to depreciate these however, this argument is also incorrect, because as explained in the discussion concerning section 174, the nature of the property is determinative, and not the particular taxpayer's usage of the property.

4. Inventory

The research credit provisions contain a threshold requirement that the costs included must have been incurred "in carrying on a trade or business of the taxpayer." I.R.C. § 41(b)(1). The regulations address this requirement in greater detail, providing:

An in-house research expense of the taxpayer or a contract research expense of the taxpayer is a qualified research expense only if the expense is paid or incurred by the taxpayer in carrying on a trade or business of the taxpayer. The phrase "in carrying on a trade or business" has the same meaning for purposes of section 41(b)(1) as it has for purposes of section 162. . .

In determining its gross income, should have deducted the costs of Presold from sales as costs of goods sold. Treas. Reg. §1.61-3 (gross income is "total sales less costs of goods sold"). The costs of the Presold were not paid or incurred "in carrying on a trade or business" for purposes of section 162, and therefore, cannot be treated as "supplies" for purposes of section 41(b)(1).

V. POSITION

's position with respect to #1 was set forth in the response. Essentially, argues that because the was used for research, the costs were deductible under section 174 and were also QRE. As explained above, this argument is based on a fundamental misunderstanding of the operation of both section 174 and section 41.

